WARNING LETTER
AND
NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 21, 2000

Mr. John Landrum
Kenai Region Manager
North American E&P
Phillips Petroleum Company
P.O. Box Drawer 66
Kenai, AK 99611

CPF No. 520003001

Dear Mr. Landrum:

On November 15 through 17, 1999, a representative of the Western Region, Office of Pipeline Safety, pursuant to Chapter 601 of 49 United States Code, conducted an on site safety inspection of the Phillips Liquefied Natural Gas (LNG) facilities, manuals, and records in Kenai, AK.

As a result of the inspection, it appears that Phillips has committed probable violations as noted below of pipeline safety regulations Title 49, Code of Federal Regulations (CFR), Part 193. The items inspected and probable violations are:

1. **§193.2635 Monitoring corrosion control. Corrosion protection provided as required by this subpart must be periodically monitored to give early recognition of ineffective corrosion protection, including the following, as applicable:**
   (d) Each component that is protected from atmospheric corrosion must be inspected at intervals not exceeding 3 years.

   Phillips' LNG procedures are inadequate because they employ a 5 year cycle for the inspections for atmospheric corrosion and not the required 3 year cycle.

2. **§193.2605 Maintenance procedures.**
(c) Each operator shall include in the manual required by paragraph (b) of this section instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of §191.23 of this subchapter.

Phillips' procedures for reporting Safety Related Conditions are inadequate because they have no site-specific criteria or instructions that enable personnel to recognize safety-related conditions. Instead, Parts 191 and 193 are referenced as having criteria to be used in the determination of a Safety Related Condition. Citation of U.S. DOT regulations cannot be used as a sole reference for determination of safety-related conditions. Instructions must be specific to the facility.

3. **§193.2635 Monitoring corrosion control. Cathodic protection. Corrosion protection provided as required by this subpart must be periodically monitored to give early recognition of ineffective corrosion protection, including the following, as applicable:**
(a) Each buried or submerged component under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of §192.463 of this chapter.

Phillips' cathodic protection monitoring procedures are inadequate because they use an "ON" pipe to soil potential of -.85 Volt with reference to a saturated copper-copper sulfate half cell at ground surface as a determination of adequate cathodic protection which does not account for (IR) drops. Under Appendix D section I, which §192.463 references, a structure is considered protected if there is a negative (cathodic) voltage of at least 0.85 volt. (Determination of this voltage must be made with the protective current applied, and in accordance with sections II and IV of this appendix.) Section II states IR drops other than those across the structure electrolyte boundary must be considered for valid interpretation of the voltage measurement in paragraphs A(1) of section I of the appendix. Instant "off" voltage is considered one acceptable method of accounting for IR drops. As justification for the above procedure, Phillips provided OPS a copy of RPO169-83 Section 6: Criteria for Cathodic Protection which does not address IR drops. It should be noted though that current versions of RPO169 do state that IR drops must be taken into account for valid interpretation of voltage measurements.

4. **§193.2629 External corrosion control; buried or submerged components.(a) Each buried or submerged component that is subject to external corrosive attack must be protected from external corrosion by:**
(2) The following means:

(ii) A cathodic protection system designed to protect components in their entirety in accordance with the requirements of §192.463 of this chapter and placed in operation before October 23, 1981, or within 1 year after the component is constructed or installed, whichever is later.

September 1999 cathodic protection survey records show that "ON" potentials are more negative than -.85 volt, but voltages do not take into account IR drops. Instant off potentials (which do account for IR drops)measured at the Phillips side of the Unocal pipeline and the plant bypass line were less negative than -.85 volts. Adequate cathodic protection requires a voltage more negative than -.85 volt with IR drops taken into account.

5. **§193.2625 Corrosion protection. (a) Each operator shall determine which metallic components could, unless corrosion is controlled, have their integrity or reliability adversely affected by external, internal, or atmospheric corrosion during their intended service life.**

Phillips does not have a listing of metallic components that could have their integrity or reliability adversely affected by corrosion.

In regard to Items 1 through 3, when it is found that an operator's procedures are inadequate, the operator, after notice and opportunity for hearing as provided in 49 CFR §190.237, may be required to amend its plans and procedures. This letter serves as your notice of inadequate procedures and your response options as prescribed under §190.237. The operator is allowed thirty (30) days after receipt of such notice to either submit written comments or request an informal hearing. After considering the material presented, the Office of Pipeline Safety is required to notify the operator of the required amendment or to withdraw the notice proposing the amendment. If you do not desire to contest the notice, within thirty (30) days of receipt of this notice, you must prepare the revised procedures and provide a copy to:

Director, Western Region
Office of Pipeline Safety
Research and Special Programs Administration
12600 West Colfax Avenue, Suite A-250
Lakewood, Colorado 80215

In regard to Items 4 and 5, pursuant to 49 United States Code, §60122, you are subject to a civil penalty not to exceed $25,000 for each violation for each day the violation persists up to a maximum of $500,000 for any related series of violations. We have reviewed the circumstances and supporting documents involved in this case, and have decided not to assess you a civil penalty. We advise you, however, that should you not correct the circumstances leading to the violations, or those violations reoccur, we will take enforcement action when and if the continued violations come to our attention.

You will not hear from us again with regard to Items 4 and 5 and our subsequent action. Because of the good faith that you have exhibited up to this time, we expect that you will act to bring your pipeline and your operations into compliance with pipeline safety regulations.

Please refer to **CPF No. 520003001** in any correspondence or communication on this matter.

Sincerely,

Chris Hoidal P.E.
Director

Enc: Response Options

cc: Compliance Registry